

ABSTRACT OF THE DISCLOSURE

A hand-held imager which is capable of reading both linear and two dimensional symbologies, which can perform focusing and illuminating steps quickly and accurately so as to eliminate variation in the position of the imager relative to the code becoming a negative factor, in which can operate in environment where the imager is anywhere from 1.5 inches to 16 inches from the code. The imager includes an imaging system having a focusing system, an illumination system, and a two-dimensional photodetector which forms an image of the coded symbology. After achieving targeting of the coded symbology, the scanning system adjusts the focus between multiple different focuses, and utilizes a portion of the two-dimensional photodetector to determine the optimum focus. Upon the determination of optimum focus, the focusing system is returned to the focusing configuration established in the initial focusing step, and an image is created using the entire two-dimensional photodetector. Optimum illumination is determined using the same two-dimensional photodetector.

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